

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30				1. REQUISITION NUMBER SEE SCHEDULE		PAGE 1 OF 41	
2. CONTRACT NO. W911RQ-07-P-0171		3. AWARD/EFFECTIVE DATE 08-May-2007		4. ORDER NUMBER		5. SOLICITATION NUMBER W911RQ-07-T-0084	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME PETE PETERSON				b. TELEPHONE NUMBER (No Collect Calls) 903-334-2206	
9. ISSUED BY RED RIVER ARMY DEPOT DIRECTORATE FOR CONTRACTING 100 MAIN DRIVE BUILDING 431 TEXARKANA TX 75507-5000  TEL: FAX:		CODE W911RQ		10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS <input type="checkbox"/> 8(A)  NAICS: SIZE STANDARD:		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE  13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)  13b. RATING  14. METHOD OF SOLICITATION <input checked="" type="checkbox"/> RFQ <input type="checkbox"/> IFB <input type="checkbox"/> RFP	
15. DELIVER TO RED RIVER ARMY DEPOT DARLENE PHELPS XR CONSOL PROP OFF DDRT BLDG 499 10TH STREET AND K AVENUE TEXARKANA TX 75507-5000		CODE W45G18		16. ADMINISTERED BY PETE PETERSON PHONE: 903-334-2206 FAX: 903-334-2541 OR 2628 PETE.PETERSON4@US.ARMY.MIL TEXARKANA TX 75507-5000			
17a. CONTRACTOR/OFFEROR SOUTHEAST MATERIAL HANDLING SYSTEMS INC BILL ZURICK 1725 COGSWELL ST ROCKLEDGE FL 32955-3208  TEL. 321-639-6400		CODE 1X1Z3		18a. PAYMENT WILL BE MADE BY DFAS - ROCK ISLAND OPERATING LOCATION ATTN: DFAS-RI-FPV BLDG 68 ROCK ISLAND IL 61299-8300			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		<input type="checkbox"/> 18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
SEE SCHEDULE							
25. ACCOUNTING AND APPROPRIATION DATA  See Schedule						26. TOTAL AWARD AMOUNT (For Govt. Use Only)  \$221,492.00	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED.    ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED <input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED.    ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED							
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>1</u> COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.  REF: Quote BII 20 April 2007				29. AWARD OF CONTRACT: REFERENCE <input type="checkbox"/> OFFER DATED . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: SEE SCHEDULE			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)  <i>Rose Mary Spearman</i>		31c. DATE SIGNED  08-May-2007	
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)		30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)  ROSE M. SPEARMAN / CONTRACTING OFFICER  TEL: 903-334-2604                      EMAIL: rose.m.spearman@us.army.mil			

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS  
(CONTINUED)**

PAGE 2 OF 41

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	<b>SEE SCHEDULE</b>				

32a. QUANTITY IN COLUMN 21 HAS BEEN

☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: \_\_\_\_\_

32b. SIGNATURE OF AUTHORIZED GOVERNMENT  
REPRESENTATIVE

32c. DATE

32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT  
REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER

34. VOUCHER NUMBER

35. AMOUNT VERIFIED  
CORRECT FOR

36. PAYMENT

☐ COMPLETE ☐ PARTIAL ☐ FINAL

37. CHECK NUMBER

38. S/R ACCOUNT NUMBER

39. S/R VOUCHER NUMBER

40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT

42a. RECEIVED BY (*Print*)

41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

41c. DATE

42b. RECEIVED AT (*Location*)

42c. DATE REC'D (*YY/MM/DD*)

42d. TOTAL CONTAINERS

## Section SF 1449 - CONTINUATION SHEET

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	Bridge Crane FFP Structural Steel Runway, Free-Standing, Length 60' with Structural Support Columns, Runway Electrification and Overhead Bridge Crane, Double Girder Type, Top-Running, Span 54' 0", 3 Ton Capacity. See attached specifications, RRAD Drawing# 2053252 & Southeast Material Handling Systems Drawing# 3339-3 Ton DG. FOB: Destination NSN: 395000X075357 MILSTRIP: W45G1870711245 PURCHASE REQUEST NUMBER: W45G1870711245	1	Each	\$52,441.00	\$52,441.00
NET AMT					\$52,441.00
ACRN AA CIN: W45G18707112450001					\$52,441.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	Bridge Crane FFP Structural Steel Runway, Free-Standing, Length 61' with Structural Support Columns, Runway Electrification and Overhead Bridge Crane, Double Girder Type, Top-Running, Span 54' 0", 3 Ton Capacity. See attached specifications, RRAD Drawing# 2053252 & Southeast Material Handling Systems Drawing# 3339-3 Ton DG. FOB: Destination NSN: 395000X075356 MILSTRIP: W45G1870711244 PURCHASE REQUEST NUMBER: W45G1870711244	1	Each	\$52,441.00	\$52,441.00
NET AMT					\$52,441.00
ACRN AB CIN: W45G18707112440001					\$52,441.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Bridge Crane FFP Structural Steel Runway, Free-Standing, Length 80' with Structural Support Columns, Runway Electrification and Overhead Bridge Crane, Double Girder Type, Top-Running, Span 54' 0", 3 Ton Capacity. See attached specifications, RRAD Drawing# 2053252 & Southeast Material Handling Systems Drawing# 3339-3 Ton DG. FOB: Destination NSN: 395000X075413 MILSTRIP: W45G1870861209 PURCHASE REQUEST NUMBER: W45G1870861209	2	Each	\$58,305.00	\$116,610.00
NET AMT					\$116,610.00
ACRN AC CIN: W45G18708612090001					\$116,610.00

## INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government
0002	Destination	Government	Destination	Government
0003	Destination	Government	Destination	Government

## DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
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0001	09-JUL-2007	1	RED RIVER ARMY DEPOT DARLENE PHELPS XR CONSOL PROP OFF DDRT BLDG 499 10TH STREET AND K AVENUE TEXARKANA TX 75507-5000 903-334-3818 FOB: Destination	W45G18
0002	09-JUL-2007	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W45G18
0003	09-JUL-2007	2	(SAME AS PREVIOUS LOCATION) FOB: Destination	W45G18

## ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930AAPP6D      31EA5PB000W45G1870711245Z949F9041117  
AMOUNT: \$52,441.00  
CIN W45G18707112450001: \$52,441.00

AB: 97X4930AAPP6D      31EA5PB000W45G1870711244Z949F9041117  
AMOUNT: \$52,441.00  
CIN W45G18707112440001: \$52,441.00

AC: 97X4930AAPP6D      31EA5PB000W45G1870861209Z949F9041117  
AMOUNT: \$116,610.00  
CIN W45G18708612090001: \$116,610.00

## CLAUSES INCORPORATED BY REFERENCE

52.212-4      Contract Terms and Conditions--Commercial Items      FEB 2007

## CLAUSES INCORPORATED BY FULL TEXT

52.000-4003    ISO 9001:2000 REGISTERED  
Red River Army Depot, an ISO 9001:2000 registered industrial complex, is committed to quality.

52.00-4050    ADDITIONAL INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

# Line Item# 0001

## SPECIFICATION

FOR  
 STRUCTURAL STEEL RUNWAY  
 FREE-STANDING, LENGTH: 60' (FEET)  
 WITH  
 STRUCTURAL SUPPORT COLUMN (S)  
 RUNWAY ELECTRIFICATION  
 AND  
 OVERHEAD BRIDGE CRANE, DOUBLE GRIDER TYPE, TOP-RUNNING  
 SPAN 54' 0", 3 TON CAPACITY

1. SCOPE

This specification covers the requirements for structural steel, free-standing crane runway within electrification capable of supporting industrial bridge crane (s), top running type, 3-ton capacity 6,000 (lbs), with double girder, bridge drive, motorized end truck, motorized trolley, hoist, hoist drive, hoist pendant control, remote control units, components that will produce an operational overhead bridge crane system.

1.1 Scope This specification covers the requirements for a prefabricated structural steel free-standing crane runway with free-standing column (s).and runway electrification conductor system with suitable installation devices that will produce an operational overhead bridge crane system for assembly and installation by the Government.

1.2 Omission from Specification. All materials necessary to provide a complete and usable piece of equipment shall be furnished even though not specifically covered by this specification.

1.3. Intended Use. The bridge crane will be used for the disassembly and assembly of tactical vehicles within existing shop building.

2. APPLICABLE DOCUMENTS.

2.1 The following documents of the issue in affect on date of invitation of bids, from a part of this specification. This issue in effect on date of invitation for bids shall apply.

Specification

Federal

RR-W-410a

Wire Rope and Strand

CC-M-1807

Motors, Alternating Current, Fractional and  
Integral Horsepower (500 HP and smaller)

CC-V-173

Military

National Electrical Manufacture's Association (NEMA)

IC-1	Industrial Controls
MG-1	Motors and Generators
SG-1	Low Voltage Power Circuit Breakers
Uniform Classification Committee (UCC)	
American National Standards Institute	
ASAB 30/2	Safety Code for Cranes.

### 3. REQUIREMENTS

3.1 General The equipment to be furnished under this specification shall be constructed to handle a live load of 3-tons (6,000 lbs) plus 25 % shock load with a factor of safety not less than five (5). All structural shapes shall meet the requirements of the A.I.S.C Manual of Steel Construction. The overall performance shall meet or exceed the requirements of the American National Standards Institute for Crane, Derricks, and Hoists. The equipment furnished shall meet or exceed specification of the Electrical Overhead Crane Institute and conform to all OSHA regulations governing this type of equipment.

3.2 Specific. The structural steel crane runway shall be designed or meet the following conditions and building dimensions:

a.	Runway Type:	Free Standing
b.	FOR: Crane Type	Top Running
c.	Rated Load Capacity:	3-Ton 6,000 (1b)
d.	Runway Length:	60' 0" (Min)
e.	Runway Span (Centerline to Centerline):	54' 0"
f.	Runway Rail Type:	C/W 40 # ASCE Rail
g.	Runway Column Support (Beam) Center /Center Spacing:	15' 0" to 24' 0"

NOTE: The runway column locations  
Are not flexible and could vary from  
15' 0" to 24' 0" with an average of  
20' 0" on center to accommodate  
existing facility.

h.	Runway Column Support Plate:	2' X 3' (Max)
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NOTE: Free Standing Runway Structural  
shall be capable of being supported by a concrete  
foundation with a minimum thickness of 8"  
4,000 psi., load factor.

i.	Overall Height Runway Height: Top of Trolley Control Panel	15' 2" (Max)
j.	Electrification:	Duct-O-Bar
k.	Runway Electrification Length	70' 0" (Min)
l.	Bridge Crane Type:	Double Girder
m.	Bridge Travel:	Top Running
n.	Span:	54' 0"
o.	Bridge Crane Load Capacity:	3 Ton, 6,000 (lbs)
p.	Axle Type:	Fixed
q.	Hoist Type:	Wire Rope, 7/16" Dia., (Min)
r.	Hoist Speed:	18' fpm (Min)
s.	Crane Speed:	100 fpm. (Variable)
t.	Trolley Speed:	50 fpm, (Variable)
u.	Bridge Controls:	Independent & Remote
v.	Remote Control Location:	Portable
w.	Control Point:	6' 0 " Off Floor Line (Min)
x.	Hook Height:	12' 10" (Min)
y.	Electrical:	208,460/480 Volts, 3P, 60 Hz
z.	Service:	Class (C), CMAA

### 3.3 DESCRIPTION.

3.3.1 Structural Steel Crane Runway: The 3-ton capacity, free-standing crane runway shall be structural steel, column mounted, capable of supporting a top running overhead bridge crane consisting of double girder wheel mounted bridge, with a bridge conductor system, motorized trolley, and a pendant push button control station including remote control station capable of being operated from handheld position (s). The crane runway shall also employ a electrification system capable of providing electrical current to a bridge crane, equipped with electrical control panel, electrical/mechanical end truck drives motor (s), trolley drive motor (s), hoist motor (s), manual/remote,(operated) control (s). The crane runway shall be supplied with suitable hardware required to produce an operational top running, free-standing crane runway system.

3.4 Materials Except as otherwise specified herein or in the reference documents of section 2, materials shall be in accordance with best commercial practice. The main crane bridge structure shall be ASTM design. All materials used in the fabrication of the integral overhead traveling crane and electrification system including components/parts to be supplied for customer assembly and installation shall be as new. The materials shall possess

physical and chemical characteristics that shall assure, on their proper application/use, a reliable and safe operable overhead crane with a 3-ton load handling capacity.

3.4.1 Runway Rails: The crane runway shall be designed to be support top-running end trucks that can be aligned to operate on runway rails having a span of 54' 0", (center-to-center) of crane rails. Suitable stops with bumpers shall be provided at each end of crane runway to stop the bridge at the maximum safe limit of travel for a top running , double girder, overhead bridge crane.

3.4.2 Casting and Forgings. All castings shall be sound and free from patching, misplaced coring, warping, blowholes, porosity, cracks, or other defects, which might render them unsound for use. Forging shall be free from scale, enclosures, cold shuts, and other defects, which might render then unsound for use. Strength and other essential physical and chemical properties of the castings and forgings shall be adequate to meet the requirements specified herein.

3.5 Construction. The integral overhead traveling crane, and the associated structural components including electrification (conductor) system components/parts; shall be free from any construction characteristics of defects that shall prevent them from passing the examination and test requirements of section 4 of this specification. No processes shall be used for reclaiming any components/parts. All surfaces of all components shall be free and clean from sharp edges. All screws, bolts, nuts, pins, latches, and similar parts shall be installed to prevent unintentional loss of tightness or release. Components/parts subject to adjustment or removal shall not be swaged, peened, staked, or otherwise permanently deformed.

3.5.1 Welding. The surface of parts to be welded shall be free from rust, scale, paint, grease or other foreign matter. Spot welds for strength shall not be used. Weld penetration shall be such as to provide transference of maximum design stress through the base metal juncture. Fillet welds shall be made where necessary to reduce stress concentration. Before assigning welder to manual welding work, on the crane structure, the manufacture shall certify to the contracting officer that the welder has passed the qualification tests as prescribed by either American Welding Society of the American Society of Mechanical Engineering for the type of welding operation to be performed.

3.5.1.1 Fabricated Parts and Components. Parts and components fabricated by welding shall be free from discontinuities, cracks, welding, undercuts, weld spatters, and any other impairing defects. Start and finish and automatic welds shall be uniform. End welds metal shall be feathered into the base metal of parts being connected.

3.5.2 Bolted Connections. All bolt holes shall be accurately punched or drilled and shall have the burrs removed. Mating surfaces shall be smooth and parallel., and matching holes shall be concentric. All bolts, nuts, an screws shall be secure. Washers and lock washers shall be provided that are suitable to the service required.

3.5.3 Electrical Connections. Connections of conductors and terminal parts shall be of, or a combination of the screw, solder, pressure compression type. When soldered connections are used, the conductors and terminal parts shall be mechanically secured before soldering. Resin core fluxes only shall be used in soldering operations. Connections to screw type terminals shall be mechanically secured with means to prevent loss of tightness.

3.5.4 Interchangeability. All parts, components, and subassemblies described in this specification; shall be manufactured to such as to permit replacement or adjustment without modification of parts or equipment.

3.5.5 Accessibility. All parts, components and sub-assemblies described in this specification, subject to wear, breakage, or distortion, and all components which require periodic maintenance, service and inspection; shall be accessible for adjustment, service and maintenance without the need for special tools or equipment.

3.5.6 Lubrication. Lubrication means shall be provided for all moving part requiring lubrication. Hydraulic lubrication fittings shall be in accordance with MIL-F3541. Pressure lubrication fittings shall

not be used where normal lubrication pressure may damage grease seals or other parts, unless an effective pressure relief feature is provided. The crane shall be lubricated prior to delivery with lubricants designated for use in 32\* (degree) to 150\* (degree), ambient temperature range. The hoist and the end trucks shall be conspicuously tagged to identify the lubricants and their temperature range. Enclosed reduction gears and automatic mechanical load-lowering brakes shall be lubricated in oil bath, and provided with means for checking the oil level, filling, and draining. Gear reduction at the truck and trolley wheels may be of an open design, and grease lubricated. Drip pans and other positive means shall be provided where required, to prevent dripping over the work areas. No lubrication shall be permitted to contact motor windings. Exposed bearings shall be fitted with dust-tight seals.

3.5.7 Threads. All threads used in the construction of structural steel crane runway and associated electrical electrification components and parts shall be machines in the inch system and shall conform to NBS Handbook H 28. .6.

3.5.9 Cleaning, Treatment, and Painting. All parts of the crane structure, and components, except wire rope and hook, normally painted in good commercial practice shall be cleaned, treated, and painted accordance with the manufacture's standard practice as applicable to the type of equipment.

3.5.10 Markings for Identification. The crane assembly shall be marked for identification in accordance with MIL-STD-130. The plate shall be of copper-based alloy.

3.5.11 Instruction Plate. The pendant control and remote control shall be equipped with an instruction plate, including such warnings and cautions as may be required for normal operation, and describing any special or important procedure to be followed in operation and servicing the crane. The plate shall be of copper-alloy.

3.5.12 Workmanship. Workmanship shall be first class to assure procurement of good quality equipment of neat general appearance, and shall conform to the best accepted commercial practice for overhead crane, top-running including associated runway electrification conductor system components.

3.5.13 Safety. The overhead traveling crane assembly shall be equipped with safety devices in accordance with USASI B 15.1 and ASA B 30.2-1943. Safety devices shall be provided on both the bridge crane, top-running trolley, and the associated electrical conductor power distribution system, remote control, including components to preclude the hazard of electrical shock to operator and maintenance personnel.

3.5.14 Technical Handbook. Five (5) copies of instruction handbooks shall be furnished as part of this specification. Two (2) copies shall accompany the equipment to it's destination. The other three (3) copies shall be forwarded by mail to: Contracting Officer, ATTN: Production Engineering Division, AMSTA-RR-ME, Red River Army Depot, Texarkana, TX 75507-5000.

3.6 Mechanical Design. The mechanical equipment on the overhead traveling crane shall be capable of operating the crane in conjunction with the motors under capacity load and at the speeds specified herein, with ease, safety, and minimum noise and vibration. The crane elements considered to be mechanical for design purposes shall be drums, sheaves, wheels, couplings, brakes, shafts, axles, bearings, gears, hooks, sheave pins, blocks, and wire rope as applicable.

3.6.1 Warning Device The bridge crane shall be equipped with electrical operated bell and flasher that will be energized when bridge is placed in motion

3.6.2 The required hardware shall be furnished with runway electrification system including current collector (s) designed to operate in conjunction with the bridge

3.7 Electrical Design. Design criteria and rating standards for electrical components covered in this specification shall be in accordance, where applicable, to the following documents reference in Section 2: CC-M-

636, CC-M-641-MIL-V-173, MIL-H-19925, NFPA No. 70-1968, ASTM B63, USASI C29.1, NEMA IC-1, NEMA MG-1, and NEMA-SG1.1 Standard Publication.

3.9 Runway Conductor Electrification. The crane runway conductor sections comprising the runway conductor system shall be suitably enclosed within rigid high temperature (220\* F), vinyl insulating covers distinctively colored to provide a visual warning of the presence of high amperage current. Each section shall be furnished with the appropriate connectors and splicing devices that assure electrical continuity and proper conductor alignment. The crane runway electrification conductor system shall be provided with installation devices and hardware that will produce an operational manual and remote controlled 3-Ton, Double Girder, Top Running, Overhead Bridge Crane System with a lifting capacity of 3-Ton, 6,000 (lbs).

#### 4. QUALITY ASSURANCE PROVISIONS.

4.1 Inspections. The Government reserves the right to perform such inspections as deemed necessary to assure material and services conform to prescribed requirements.

4.2 Examination. Upon arrival or receipt at this depot, the equipment furnished shall be examined for design, dimensions, construction, materials, components, and electrical equipment, including runway electrification system for workmanship to determine compliance with requirement of this specification. Property Officer and Production Engineering Division's officer shall perform the appropriate inspections.

4.3 Equipment. All equipment and hardware furnished by the manufacture shall be of first class workmanship or materials shall be replaced by the manufacture at no cost to the Government.

4.4 Warranty. The equipment and components furnished under this specification shall be guaranteed for a period of the specified warranty for equipment of this type or for a period of time equal to the manufacture's normal commercial warranty, or for three (3) years against defective materials, design, and workmanship. Upon receipt of notice from the Government of failure of any part of the guaranteed equipment during the warranty period, that part or component shall be replaced promptly with as new parts by and at the expense of the manufacture.

#### 5. PREPARATION FOR DELIVERY.

5.1 Loose Parts. Individual items, components, and parts to be assembled to the unit (s), at installation and their mating pieces shall be identified by stenciling or by tags meeting the requirements of MIL-STD-129.

5.2 Preservation. Equipment shall be preserved in accordance with the supplier's standard practice.

5.3 Packing. The unit shall be packed in a manner, which shall ensure arrival at this depot in satisfactory condition and be acceptable to the mode of transportation.

5.4 Markings. Shipping pallets and containers shall be marked in accordance with MIL-STD-129.

#### 6. STATEMENT OF CONFORMITY

6.1 Each bidder is required to submit a positive statement as to whether or not the item (s) being offered fully conforms to the terms of the specification. In addition, each bidder must furnish complete descriptive literature, drawings, or photographs, and technical data covering the equipment he proposed to furnish, identifying the equipment by name of the manufacture and the model number. Lack of specific and complete information will be sufficient cause for rejection of bid (s). Where the bidder's product differs from the specific requirements, each point of difference should be clearly described. His requirement is set forth to facilitate the review of bids and is not

to be construed by the bidder as a waiving any of the requirements of the specification. A duly authorized agent of the commercial vendor or contractor shall sign the certificate.

## Line Item# 0002

### SPECIFICATION

#### FOR

#### STRUCTURAL STEEL RUNWAY

FREE-STANDING, LENGTH: 61' (FEET)

#### WITH

STRUCTURAL SUPPORT COLUMN (S)

RUNWAY ELECTRIFICATION

#### AND

OVERHEAD BRIDGE CRANE, DOUBLE GRIDER TYPE, TOP-RUNNING

SPAN 54' 0", 3 TON CAPACITY

#### 1. SCOPE

This specification covers the requirements for structural steel, free-standing crane runway within electrification capable of supporting industrial bridge crane (s), top running type, 3-ton capacity 6,000 (lbs), with double girder, bridge drive, motorized end truck, motorized trolley, hoist, hoist drive, hoist pendant control, remote control units, components that will produce an operational overhead bridge crane system.

1.1 Scope This specification covers the requirements for a prefabricated structural steel free-standing crane runway with free-standing column (s).and runway electrification conductor system with suitable installation devices that will produce an operational overhead bridge crane system for assembly and installation by the Government.

1.2 Omission from Specification. All materials necessary to provide a complete and usable piece of equipment shall be furnished even though not specifically covered by this specification.

1.3. Intended Use. The bridge crane will be used for the disassembly and assembly of tactical vehicles within existing shop building.

#### 2. APPLICABLE DOCUMENTS.

2.1 The following documents of the issue in affect on date of invitation of bids, from a part of this specification. This issue in effect on date of invitation for bids shall apply.

Specification

Federal

A	36	Structural Steel
B	15.1	Safety Code for Mechanical Power Transmission Equipment

B            63                      Resistively, of Mechanically Conducting  
Resistance and Contact Materials

AMERICAN WELDING SOCEITY

5<sup>th</sup> Edition                      Welding Handbook  
  
National Electrical Manufacture’s Association (NEMA)  
  
IC-1                              Industrial Controls  
  
MG-1                            Motors and Generators  
  
SG-1                            Low Voltage Power Circuit Breakers  
  
Uniform Classification Committee (UCC)  
  
American National Standards Institute  
  
ASAB 30/2                      Safety Code for Cranes.

3.            REQUIREMENTS

3.1           General The equipment to be furnished under this specification shall be constructed to handle a live load of 3-tons (6,000 lbs) plus 25 % shock load with a factor of safety not less than five (5). All structural shapes shall meet the requirements of the A.I.S.C Manual of Steel Construction. The overall performance shall meet or exceed the requirements of the American National Standards Institute for Crane, Derricks, and Hoists. The equipment furnished shall meet or exceed specification of the Electrical Overhead Crane Institute and conform to all OSHA regulations governing this type of equipment.

3.2           Specific. The structural steel crane runway shall be designed or meet the following conditions and building dimensions:

- |    |   |                    |
|----|---|--------------------|
| a. | Runway Type:  | Free Standing      |
| b. | FOR: Crane Type   | Top Running        |
| c. | Rated Load Capacity:                                    | 3-Ton 6,000 (1b)   |
| d. | Runway Length:  | 61’ 0” (Min)       |
| f. | Runway Span<br>(Centerline to Centerline):              | 54’ 0”             |
| f. | Runway Rail Type:                                       | C/W 40 # ASCE Rail |
| g. | Runway Column Support (Beam)<br>Center /Center Spacing: | 15’ 0” to 24’ 0”   |

NOTE: The runway column locations  
Are not flexible and could vary from

15' 0" to 24' 0" with an average of  
20' 0" on center to accommodate  
existing facility.

h.	Runway Column Support Plate:	2' X 3' (Max)
	NOTE: Free Standing Runway Structural shall be capable of being supported by a concrete foundation with a minimum thickness of 8" 5,000 psi., load factor.	
i.	Overall Height Runway Height: Top of Trolley Control Panel	15' 2" (Max)
j.	Electrification:	Duct-O-Bar
k.	Runway Electrification Length	70' 0" (Min)
l.	Bridge Crane Type:	Double Girder
m.	Bridge Travel:	Top Running
n.	Span:	54' 0"
o.	Bridge Crane Load Capacity:	3 Ton, 6,000 (lbs)
p.	Axle Type:	Fixed
q.	Hoist Type:	Wire Rope, 7/16" Dia., (Min)
r.	Hoist Speed:	18' fpm (Min)
s.	Crane Speed:	100 fpm. (Variable)
t.	Trolley Speed:	50 fpm, (Variable)
u.	Bridge Controls:	Independent & Remote
v.	Remote Control Location:	Portable
w.	Control Point:	6' 0 " Off Floor Line (Min)
x.	Hook Height:	12' 10" (Min)
y.	Electrical:	208,460/480 Volts, 3P 60 Hz
z.	Service:	Class (C), CMAA

### 3.3 DESCRIPTION.

3.3.1 Structural Steel Crane Runway : The 3-ton capacity, free-standing crane runway shall be structural steel, column mounted, capable of supporting a top running overhead bridge crane consisting of double girder wheel mounted bridge, with a bridge conductor system, motorized trolley, and a pendant push button control

station including remote control station capable of being operated from handheld position (s). The crane runway shall also employ a electrification system capable of providing electrical current to a bridge crane, equipped with electrical control panel, electrical/mechanical end truck drives motor (s), trolley drive motor (s), hoist motor (s), manual/remote,(operated) control (s). The crane runway shall be supplied with suitable hardware required to produce an operational top running, free-standing crane runway system.

3.4 Materials Except as otherwise specified herein or in the reference documents of section 2, materials shall be in accordance with best commercial practice. The main crane bridge structure shall be ASTM design. All materials used in the fabrication of the integral overhead traveling crane and electrification system including components/parts to be supplied for customer assembly and installation shall be as new. The materials shall possess physical and chemical characteristics that shall assure, on their proper application/use, a reliable and safe operable overhead crane with a 3-ton load handling capacity.

3.4.1 Runway Rails: The crane runway shall be designed to be support top-running end trucks that can be aligned to operate on runway rails having a span of 54' 0", (center-to-center) of crane rails. Suitable stops with bumpers shall be provided at each end of crane runway to stop the bridge at the maximum safe limit of travel for a top running , double girder, overhead bridge crane.

3.4.2 Casting and Forgings. All castings shall be sound and free from patching, misplaced coring, warping, blowholes, porosity, cracks, or other defects, which might render them unsound for use. Forging shall be free from scale, enclosures, cold shuts, and other defects, which might render them unsound for use. Strength and other essential physical and chemical properties of the castings and forgings shall be adequate to meet the requirements specified herein.

3.5 Construction. The integral overhead traveling crane, and the associated structural components including electrification (conductor) system components/parts; shall be free from any construction characteristics of defects that shall prevent them from passing the examination and test requirements of section 4 of this specification. No processes shall be used for reclaiming any components/parts. All surfaces of all components shall be free and clean from sharp edges. All screws, bolts, nuts, pins, latches, and similar parts shall be installed to prevent unintentional loss of tightness or release. Components/parts subject to adjustment or removal shall not be swaged, peened, staked, or otherwise permanently deformed.

3.5.1 Welding. The surface of parts to be welded shall be free from rust, scale, paint, grease or other foreign matter. Spot welds for strength shall not be used. Weld penetration shall be such as to provide transference of maximum design stress through the base metal juncture. Fillet welds shall be made where necessary to reduce stress concentration. Before assigning welder to manual welding work, on the crane structure, the manufacture shall certify to the contracting officer that the welder has passed the qualification tests as prescribed by either American Welding Society or the American Society of Mechanical Engineering for the type of welding operation to be performed.

3.5.1.1 Fabricated Parts and Components. Parts and components fabricated by welding shall be free from discontinuities, cracks, welding, undercuts, weld spatters, and any other impairing defects. Start and finish and automatic welds shall be uniform. End welds metal shall be feathered into the base metal of parts being connected.

3.5.2 Bolted Connections. All bolt holes shall be accurately punched or drilled and shall have the burrs removed. Mating surfaces shall be smooth and parallel., and matching holes shall be concentric. All bolts, nuts, and screws shall be secure. Washers and lock washers shall be provided that are suitable to the service required.

3.5.3 Electrical Connections. Connections of conductors and terminal parts shall be of, or a combination of the screw, solder, pressure compression type. When soldered connections are used, the conductors and terminal parts shall be mechanically secured before soldering. Resin core fluxes only shall be used in soldering operations. Connections to screw type terminals shall be mechanically secured with means to prevent loss of tightness.

3.5.4 Interchangeability. All parts, components, and subassemblies described in this specification; shall be manufactured to such as to permit replacement or adjustment without modification of parts or equipment.

3.5.5 Accessibility. All parts, components and sub-assemblies described in this specification, subject to wear, breakage, or distortion, and all components which require periodic maintenance, service and inspection; shall be accessible for adjustment, service and maintenance without the need for special tools or equipment.

3.5.6 Lubrication. Lubrication means shall be provided for all moving part requiring lubrication. Hydraulic lubrication fittings shall be in accordance with MIL-F3541. Pressure lubrication fittings shall not be used where normal lubrication pressure may damage grease seals or other parts, unless an effective pressure relief feature is provided. The crane shall be lubricated prior to delivery with lubricants designated for use in 32\*, (degree) to 150\* (degree), ambient temperature range. The hoist and the end trucks shall be conspicuously tagged to identify the lubricants and their temperature range. Enclosed reduction gears and automatic mechanical load-lowering brakes shall be lubricated in oil bath, and provided with means for checking the oil level, filling, and draining. Gear reduction at the truck and trolley wheels may be of an open design, and grease lubricated. Drip pans and other positive means shall be provided where required, to prevent dripping over the work areas. No lubrication shall be permitted to contact motor windings. Exposed bearings shall be fitted with dust-tight seals.

3.5.7 Threads. All threads used in the construction of structural steel crane runway and associated electrical electrification components and parts shall be machines in the inch system and shall conform to NBS Handbook H 28. .6.

3.5.9 Cleaning, Treatment, and Painting. All parts of the crane structure, and components, except wire rope and hook, normally painted in good commercial practice shall be cleaned, treated, and painted accordance with the manufacture's standard practice as applicable to the type of equipment.

3.5.10 Markings for Identification. The crane assembly shall be marked for identification in accordance with MIL-STD-130. The plate shall be of copper-based alloy.

3.5.11 Instruction Plate. The pendant control and remote control shall be equipped with an instruction plate, including such warnings and cautions as may be required for normal operation, and describing any special or important procedure to be followed in operation and servicing the crane. The plate shall be of copper-alloy.

3.5.12 Workmanship. Workmanship shall be first class to assure procurement of good quality equipment of neat general appearance, and shall conform to the best accepted commercial practice for overhead crane, top-running including associated runway electrification conductor system components.

3.5.13 Safety. The overhead traveling crane assembly shall be equipped with safety devices in accordance with USASI B 15.1 and ASA B 30.2-1943. Safety devices shall be provided on both the bridge crane, top-running trolley, and the associated electrical conductor power distribution system, remote control, including components to preclude the hazard of electrical shock to operator and maintenance personnel.

3.5.14 Technical Handbook. Five (5) copies of instruction handbooks shall be furnished as part of this specification. Two (2) copies shall accompany the equipment to it's destination. The other three (3) copies shall be forwarded by mail to: Contracting Officer, ATTN: Production Engineering Division, AMSTA-RR-ME, Red River Army Depot, Texarkana, TX 75507-5000.

3.6 Mechanical Design. The mechanical equipment on the overhead traveling crane shall be capable of operating the crane in conjunction with the motors under capacity load and at the speeds specified herein, with ease, safety, and minimum noise and vibration. The carne elements considered to be mechanical for design proposes shall be drums, sheaves, wheels, couplings, brakes, shafts, axles, bearings, gears, hooks, sheave pins, blocks, and wire rope as applicable.

3.6.1 Warning Device The bridge crane shall be equipped with electrical operated bell and flasher that will be energized when bridge is placed in motion

3.6.2 The required hardware shall be furnished with runway electrification system including current collector (s) designed to operate in conjunction with the bridge

3.7 Electrical Design. Design criteria and rating standards for electrical components covered in this specification shall be in accordance, where applicable, to the following documents reference in Section 2: CC-M-636, CC-M-641-MIL-V-173, MIL-H-19925, NFPA No. 70-1968, ASTM B63, USASI C29.1, NEMA IC-1, NEMA MG-1, and NEMA-SG1.1 Standard Publication.

3.9 Runway Conductor Electrification. The crane runway conductor sections comprising the runway conductor system shall be suitably enclosed within rigid high temperature (220\* F), vinyl insulating covers distinctively colored to provide a visual warning of the presence of high amperage current. Each section shall be furnished with the appropriate connectors and splicing devices that assure electrical continuity and proper conductor alignment. The crane runway electrification conductor system shall be provided with installation devices and hardware that will produce an operational manual and remote controlled 3-Ton, Double Girder, Top Running, Overhead Bridge Crane System with a lifting capacity of 3-Ton, 6,000 (lbs).

#### 4. QUALITY ASSURANCE PROVISIONS.

4.1 Inspections. The Government reserves the right to perform such inspections as deemed necessary to assure material and services conform to prescribed requirements.

4.2 Examination. Upon arrival or receipt at this depot, the equipment furnished shall be examined for design, dimensions, construction, materials, components, and electrical equipment, including runway electrification system for workmanship to determine compliance with requirement of this specification. Property Officer and Production Engineering Division's officer shall perform the appropriate inspections.

4.3 Equipment. All equipment and hardware furnished by the manufacture shall be of first class workmanship or materials shall be replaced by the manufacture at no cost to the Government.

4.4 Warranty. The equipment and components furnished under this specification shall be guaranteed for a period of the specified warranty for equipment of this type or for a period of time equal to the manufacture's normal commercial warranty, or for three (3) years against defective materials, design, and workmanship. Upon receipt of notice from the Government of failure of any part of the guaranteed equipment during the warranty period, that part or component shall be replaced promptly with as new parts by and at the expense of the manufacture.

#### 5. PREPARATION FOR DELIVERY.

5.1 Loose Parts. Individual items, components, and parts to be assembled to the unit (s), at installation and their mating pieces shall be identified by stenciling or by tags meeting the requirements of MIL-STD-129.

5.2 Preservation. Equipment shall be preserved in accordance with the supplier's standard practice.

5.3 Packing. The unit shall be packed in a manner, which shall ensure arrival at this depot in satisfactory condition and be acceptable to the mode of transportation.

5.4 Markings. Shipping pallets and containers shall be marked in accordance with MIL-STD-129.

## 6. STATEMENT OF CONFORMITY

6.1 Each bidder is required to submit a positive statement as to whether or not the item (s) being offered fully conforms to the terms of the specification. In addition, each bidder must furnish complete descriptive literature, drawings, or photographs, and technical data covering the equipment he proposed to furnish, identifying the equipment by name of the manufacturer and the model number. Lack of specific and complete information will be sufficient cause for rejection of bid (s). Where the bidder's product differs from the specific requirements, each point of difference should be clearly described. This requirement is set forth to facilitate the review of bids and is not to be construed by the bidder as a waiving any of the requirements of the specification. A duly authorized agent of the commercial vendor or contractor shall sign the certificate.

### Line Item# 0003

#### SPECIFICATION

#### FOR

#### STRUCTURAL STEEL RUNWAY

FREE-STANDING, LENGTH: 80' (FEET)

#### WITH

STRUCTURAL SUPPORT COLUMN (S)

RUNWAY ELECTRIFICATION

#### AND

OVERHEAD BRIDGE CRANE, DOUBLE GIRDER TYPE, TOP-RUNNING

SPAN 54' 0", 3 TON CAPACITY

## 1. SCOPE

This specification covers the requirements for structural steel, free-standing crane runway within electrification capable of supporting industrial bridge crane (s), top running type, 3-ton capacity 6,000 (lbs), with double girder, bridge drive, motorized end truck, motorized trolley, hoist, hoist drive, hoist pendant control, remote control units, components that will produce an operational overhead bridge crane system.

1.1 Scope This specification covers the requirements for a prefabricated structural steel free-standing crane runway with free-standing column (s) and runway electrification conductor system with suitable installation devices that will produce an operational overhead bridge crane system for assembly and installation by the Government.

1.2 Omission from Specification. All materials necessary to provide a complete and usable piece of equipment shall be furnished even though not specifically covered by this specification.

1.3 Intended Use. The bridge crane will be used for the disassembly and assembly of tactical vehicles within existing shop building.

## 2. APPLICABLE DOCUMENTS.

2.1 The following documents of the issue in effect on date of invitation of bids, from a part of this specification. This issue in effect on date of invitation for bids shall apply.

### Specification

#### Federal

RR-W-410a	Wire Rope and Strand
CC-M-1807	Motors, Alternating Current, Fractional and Integral Horsepower (500 HP and smaller)
CC-V-173	

#### Military

MIL-V-173	Varnish, Moisture, and Fungus-Resistant, for The Treatment of Communication, Electronic, And Associated Electrical Equipment.
MIL-F3541	Fittings, Lubrication (Hydraulic)
MIL-H-19925	Hoists Rope, Wire Rope, Electric Powered

### STANDARDS

#### Military

MIL-STD	129 Markings for Shipment and Storage
MIL-STD	MIL-130 Identification of Marking of U. S. Military

2.2 OTHER PUBLICATIONS The following documents from a part of this specification. This issue in effect on date of bids shall apply.

### Occupational Safety and Health Standards

#### National Bureau of Standards

Handbook H 28 Screw Thread Standards Services.

National Fire Protection Association.

NERPA No. 70-1973 National Electrical Code

Electric Overhead Crane Institute, Inc

EOCI No. 61	Specifications for Electric Overhead
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## Traveling Cranes

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

A	36	Structural Steel
B	15.1	Safety Code for Mechanical Power Transmission Equipment
B	63	Resistively, of Mechanically Conducting Resistance and Contact Materials

## AMERICAN WELDING SOCIETY

5<sup>th</sup> Edition                      Welding Handbook

National Electrical Manufacture's Association (NEMA)

IC-1                              Industrial Controls

MG-1                            Motors and Generators

SG-1                            Low Voltage Power Circuit Breakers

Uniform Classification Committee (UCC)

American National Standards Institute

ASAB 30/2                      Safety Code for Cranes.

## 3. REQUIREMENTS

3.1 General The equipment to be furnished under this specification shall be constructed to handle a live load of 3-tons (6,000 lbs) plus 25 % shock load with a factor of safety not less than five (5). All structural shapes shall meet the requirements of the A.I.S.C Manual of Steel Construction. The overall performance shall meet or exceed the requirements of the American National Standards Institute for Crane, Derricks, and Hoists. The equipment furnished shall meet or exceed specification of the Electrical Overhead Crane Institute and conform to all OSHA regulations governing this type of equipment.

3.2 Specific. The structural steel crane runway shall be designed or meet the following conditions and building dimensions:

- |    |                      |                  |
|----|----------------------|------------------|
| a. | Runway Type:         | Free Standing    |
| b. | FOR: Crane Type      | Top Running      |
| c. | Rated Load Capacity: | 3-Ton 6,000 (1b) |
| d. | Runway Length:       | 80' 0" (Min)     |
| e. | Runway Span          |                  |

	(Centerline to Centerline):	54' 0"
f.	Runway Rail Type:	C/W 40 # ASCE Rail
g.	Runway Column Support (Beam) Center /Center Spacing:	15' 0" to 24' 0"
	NOTE: The runway column locations Are not flexible and could vary from 15' 0" to 24' 0" with an average of 20' 0" on center to accommodate existing facility.	
h.	Runway Column Support Plate:	2' X 3' (Max)
	NOTE: Free Standing Runway Structural shall be capable of being supported by a concrete foundation with a minimum thickness of 8" 4,000 psi., load factor.	
i.	Overall Height Runway Height: Top of Trolley Control Panel	15' 2" (Max)
j.	Electrification:	Duct-O-Bar
k.	Runway Electrification Length	90' 0" (Min)
l.	Bridge Crane Type:	Double Girder
m.	Bridge Travel:	Top Running
n.	Span:	54' 0"
o.	Bridge Crane Load Capacity:	3 Ton, 6,000 (lbs)
p.	Axle Type:	Fixed
q.	Hoist Type:	Wire Rope, 7/16" Dia., (Min)
r.	Hoist Speed:	18' fpm (Min)
s.	Crane Speed:	100 fpm. (Variable)
t.	Trolley Speed:	50 fpm, (Variable)
u.	Bridge Controls:	Independent & Remote
v.	Remote Control Location:	Portable
w.	Control Point:	6' 0 " Off Floor Line (Min)
x.	Hook Height:	12' 10" (Min)
y.	Electrical:	208,460/480 Volts, 3P, 60 Hz

z. Service: Class (C), CMMMA

### 3.3 DESCRIPTION.

3.3.1 Structural Steel Crane Runway : The 3-ton capacity, free-standing crane runway shall be structural steel, column mounted, capable of supporting a top running overhead bridge crane consisting of double girder wheel mounted bridge, with a bridge conductor system, motorized trolley, and a pendant push button control station including remote control station capable of being operated from handheld position (s). The crane runway shall also employ a electrification system capable of providing electrical current to a bridge crane, equipped with electrical control panel, electrical/mechanical end truck drives motor (s), trolley drive motor (s), hoist motor (s), manual/remote,(operated) control (s). The crane runway shall be supplied with suitable hardware required to produce an operational top running, free-standing crane runway system.

3.4 Materials Except as otherwise specified herein or in the reference documents of section 2, materials shall be in accordance with best commercial practice. The main crane bridge structure shall be ASTM design. All materials used in the fabrication of the integral overhead traveling crane and electrification system including components/parts to be supplied for customer assembly and installation shall be as new. The materials shall possess physical and chemical characteristics that shall assure, on their proper application/use, a reliable and safe operable overhead crane with a 3-ton load handling capacity.

3.4.1 Runway Rails: The crane runway shall be designed to be support top-running end trucks that can be aligned to operate on runway rails having a span of 54' 0", (center-to-center) of crane rails. Suitable stops with bumpers shall be provided at each end of crane runway to stop the bridge at the maximum safe limit of travel for a top running, double girder, overhead bridge crane.

3.4.2 Casting and Forgings. All castings shall be sound and free from patching, misplaced coring, warping, blowholes, porosity, cracks, or other defects, which might render them unsound for use. Forging shall be free from scale, enclosures, cold shuts, and other defects, which might render them unsound for use. Strength and other essential physical and chemical properties of the castings and forgings shall be adequate to meet the requirements specified herein.

3.5 Construction. The integral overhead traveling crane, and the associated structural components including electrification (conductor) system components/parts; shall be free from any construction characteristics of defects that shall prevent them from passing the examination and test requirements of section 4 of this specification. No processes shall be used for reclaiming any components/parts. All surfaces of all components shall be free and clean from sharp edges. All screws, bolts, nuts, pins, latches, and similar parts shall be installed to prevent unintentional loss of tightness or release. Components/parts subject to adjustment or removal shall not be swaged, peened, staked, or otherwise permanently deformed.

3.5.1 Welding. The surface of parts to be welded shall be free from rust, scale, paint, grease or other foreign matter. Spot welds for strength shall not be used. Weld penetration shall be such as to provide transference of maximum design stress through the base metal juncture. Fillet welds shall be made where necessary to reduce stress concentration. Before assigning welder to manual welding work, on the crane structure, the manufacturer shall certify to the contracting officer that the welder has passed the qualification tests as prescribed by either American Welding Society or the American Society of Mechanical Engineering for the type of welding operation to be performed.

3.5.1.1 Fabricated Parts and Components. Parts and components fabricated by welding shall be free from discontinuities, cracks, welding, undercuts, weld spatters, and any other impairing defects. Start and finish and automatic welds shall be uniform. End welds metal shall be feathered into the base metal of parts being connected.

3.5.2 Bolted Connections. All bolt holes shall be accurately punched or drilled and shall have the burrs removed. Mating surfaces shall be smooth and parallel, and matching holes shall be concentric. All bolts, nuts, and screws shall be secure. Washers and lock washers shall be provided that are suitable to the service required.

3.5.3 Electrical Connections. Connections of conductors and terminal parts shall be of, or a combination of the screw, solder, pressure compression type. When soldered connections are used, the conductors and terminal parts shall be mechanically secured before soldering. Resin core fluxes only shall be used in soldering operations. Connections to screw type terminals shall be mechanically secured with means to prevent loss of tightness.

3.5.4 Interchangeability. All parts, components, and subassemblies described in this specification; shall be manufactured to such as to permit replacement or adjustment without modification of parts or equipment.

3.5.5 Accessibility. All parts, components and sub-assemblies described in this specification, subject to wear, breakage, or distortion, and all components which require periodic maintenance, service and inspection; shall be accessible for adjustment, service and maintenance without the need for special tools or equipment.

3.5.6 Lubrication. Lubrication means shall be provided for all moving part requiring lubrication. Hydraulic lubrication fittings shall be in accordance with MIL-F3541. Pressure lubrication fittings shall not be used where normal lubrication pressure may damage grease seals or other parts, unless an effective pressure relief feature is provided. The crane shall be lubricated prior to delivery with lubricants designated for use in 32\*, (degree) to 150\* (degree), ambient temperature range. The hoist and the end trucks shall be conspicuously tagged to identify the lubricants and their temperature range. Enclosed reduction gears and automatic mechanical load-lowering brakes shall be lubricated in oil bath, and provided with means for checking the oil level, filling, and draining. Gear reduction at the truck and trolley wheels may be of an open design, and grease lubricated. Drip pans and other positive means shall be provided where required, to prevent dripping over the work areas. No lubrication shall be permitted to contact motor windings. Exposed bearings shall be fitted with dust-tight seals.

3.5.7 Threads. All threads used in the construction of structural steel crane runway and associated electrical electrification components and parts shall be machines in the inch system and shall conform to NBS Handbook H 28. .6.

3.5.9 Cleaning, Treatment, and Painting. All parts of the crane structure, and components, except wire rope and hook, normally painted in good commercial practice shall be cleaned, treated, and painted accordance with the manufacture's standard practice as applicable to the type of equipment.

3.5.10 Markings for Identification. The crane assembly shall be marked for identification in accordance with MIL-STD-130. The plate shall be of copper-based alloy.

3.5.11 Instruction Plate. The pendant control and remote control shall be equipped with an instruction plate, including such warnings and cautions as may be required for normal operation, and describing any special or important procedure to be followed in operation and servicing the crane. The plate shall be of copper-alloy.

3.5.12 Workmanship. Workmanship shall be first class to assure procurement of good quality equipment of neat general appearance, and shall conform to the best accepted commercial practice for overhead crane, top-running including associated runway electrification conductor system components.

3.5.13 Safety. The overhead traveling crane assembly shall be equipped with safety devices in accordance with USASI B 15.1 and ASA B 30.2-1943. Safety devices shall be provided on both the bridge crane, top-running trolley, and the associated electrical conductor power distribution system, remote control, including components to preclude the hazard of electrical shock to operator and maintenance personnel.

3.5.14 Technical Handbook. Five (5) copies of instruction handbooks shall be furnished as part of this specification. Two (2) copies shall accompany the equipment to its destination. The other three (3) copies shall be forwarded by mail to: Contracting Officer, ATTN: Production Engineering Division, AMSTA-RR-ME, Red River Army Depot, Texarkana, TX 75507-5000.

3.6 Mechanical Design. The mechanical equipment on the overhead traveling crane shall be capable of operating the crane in conjunction with the motors under capacity load and at the speeds specified herein, with ease, safety, and minimum noise and vibration. The crane elements considered to be mechanical for design purposes shall be drums, sheaves, wheels, couplings, brakes, shafts, axles, bearings, gears, hooks, sheave pins, blocks, and wire rope as applicable.

3.6.1 Warning Device The bridge crane shall be equipped with electrical operated bell and flasher that will be energized when bridge is placed in motion

3.6.2 The required hardware shall be furnished with runway electrification system including current collector (s) designed to operate in conjunction with the bridge

3.7 Electrical Design. Design criteria and rating standards for electrical components covered in this specification shall be in accordance, where applicable, to the following documents reference in Section 2: CC-M-636, CC-M-641-MIL-V-173, MIL-H-19925, NFPA No. 70-1968, ASTM B63, USASI C29.1, NEMA IC-1, NEMA MG-1, and NEMA-SG1.1 Standard Publication.

3.9 Runway Conductor Electrification. The crane runway conductor sections comprising the runway conductor system shall be suitably enclosed within rigid high temperature (220\* F), vinyl insulating covers distinctively colored to provide a visual warning of the presence of high amperage current. Each section shall be furnished with the appropriate connectors and splicing devices that assure electrical continuity and proper conductor alignment. The crane runway electrification conductor system shall be provided with installation devices and hardware that will produce an operational manual and remote controlled 3-Ton, Double Girder, Top Running, Overhead Bridge Crane System with a lifting capacity of 3-Ton, 6,000 (lbs).

#### 4. QUALITY ASSURANCE PROVISIONS.

4.1 Inspections. The Government reserves the right to perform such inspections as deemed necessary to assure material and services conform to prescribed requirements.

4.2 Examination. Upon arrival or receipt at this depot, the equipment furnished shall be examined for design, dimensions, construction, materials, components, and electrical equipment, including runway electrification system for workmanship to determine compliance with requirement of this specification. Property Officer and Production Engineering Division's officer shall perform the appropriate inspections.

4.3 Equipment. All equipment and hardware furnished by the manufacture shall be of first class workmanship or materials shall be replaced by the manufacture at no cost to the Government.

4.4 Warranty. The equipment and components furnished under this specification shall be guaranteed for a period of the specified warranty for equipment of this type or for a period of time equal to the manufacture's normal commercial warranty, or for three (3) years against defective materials, design, and workmanship. Upon receipt of notice from the Government of failure of any part of the guaranteed equipment during the warranty period, that part or component shall be replaced promptly with as new parts by and at the expense of the manufacture.

#### 5. PREPARATION FOR DELIVERY.

5.1 Loose Parts. Individual items, components, and parts to be assembled to the unit (s), at installation and their mating pieces shall be identified by stenciling or by tags meeting the requirements of MIL-STD-129.

5.2 Preservation. Equipment shall be preserved in accordance with the supplier's standard practice.

5.3 Packing. The unit shall be packed in a manner, which shall ensure arrival at this depot in satisfactory condition and be acceptable to the mode of transportation.

5.4 Markings. Shipping pallets and containers shall be marked in accordance with MIL-STD-129.

## 6. STATEMENT OF CONFORMITY

6.1 Each bidder is required to submit a positive statement as to whether or not the item (s) being offered fully conforms to the terms of the specification. In addition, each bidder must furnish complete descriptive literature, drawings, or photographs, and technical data covering the equipment he proposed to furnish, identifying the equipment by name of the manufacture and the model number. Lack of specific and complete information will be sufficient cause for rejection of bid (s). Where the bidder's product differs from the specific requirements, each point of difference should be clearly described. His requirement is set forth to facilitate the review of bids and is not to be construed by the bidder as a waiving any of the requirements of the specification. A duly authorized agent of the commercial vendor or contractor shall sign the certificate.

### 52.211-17 DELIVERY OF EXCESS QUANTITIES (SEP 1989)

The Contractor is responsible for the delivery of each item quantity within allowable variations, if any. If the Contractor delivers and the Government receives quantities of any item in excess of the quantity called for (after considering any allowable variation in quantity), such excess quantities will be treated as being delivered for the convenience of the Contractor. The Government may retain such excess quantities up to \$250 in value without compensating the Contractor therefor, and the Contractor waives all right, title, or interests therein. Quantities in excess of \$250 will, at the option of the Government, either be returned at the Contractor's expense or retained and paid for by the Government at the contract unit price.

### 52.211-4009 DELIVERIES TO RED RIVER ARMY DEPOT (RRAD)

Receiving hours at Red River Army Depot are from 7:00 AM to 1:00 PM, Monday through Friday (excluding Federal holidays). Telephone (903) 334-3520.

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (NOV 2006)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

  X   (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

       (2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999) (15 U.S.C. 657a).

  X   (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JUL 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

       (4) [Removed].

       (5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

       (ii) Alternate I (OCT 1995) of 52.219-6.

       (iii) Alternate II (MAR 2004) of 52.219-6.

       (6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

       (ii) Alternate I (OCT 1995) of 52.219-7.

       (iii) Alternate II (MAR 2004) of 52.219-7.

  X   (7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d)(2) and (3)).

       (8)(i) 52.219-9, Small Business Subcontracting Plan (SEP 2006) (15 U.S.C. 637(d)(4)).

       (ii) Alternate I (OCT 2001) of 52.219-9

       (iii) Alternate II (OCT 2001) of 52.219-9.

       (9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).

       (10)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (SEP 2005) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

       (ii) Alternate I (JUNE 2003) of 52.219-23.

\_\_\_ (11) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

\_\_\_ (12) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

\_\_\_ (13) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004).

\_X\_ (14) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).

\_X\_ (15) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (JAN 2006) (E.O. 13126).

\_X\_ (16) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).

\_X\_ (17) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).

\_X\_ (18) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

\_X\_ (19) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

\_X\_ (20) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

\_X\_ (21) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

\_\_\_ (22)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).

\_\_\_ (ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(c)).

\_\_\_ (23) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).

\_\_\_ (24)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (NOV 2006) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78, 108-286, 109-53 and 109-169).

\_\_\_ (ii) Alternate I (JAN 2004) of 52.225-3.

\_\_\_ (iii) Alternate II (JAN 2004) of 52.225-3.

\_\_\_ (25) 52.225-5, Trade Agreements (NOV 2006) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

\_X\_ (26) 52.225-13, Restrictions on Certain Foreign Purchases (FEB 2006) (E.O.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of Treasury).

\_\_\_ (27) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (42 U.S.C. 5150).

\_\_\_ (28) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (42 U.S.C. 5150).

\_\_\_ (29) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

\_\_\_\_ (30) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X (31) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

\_\_\_\_ (32) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332).

\_\_\_\_ (33) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).

\_\_\_\_ (34) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

\_\_\_\_ (35)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

\_\_\_\_ (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]

\_\_\_\_ (1) 52.222-41, Service Contract Act of 1965, as Amended (JUL 2005) (41 U.S.C. 351, et seq.).

\_\_\_\_ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

\_\_\_\_ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (NOV 2006) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

\_\_\_\_ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (February 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (April 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965, as Amended (Jul 2005), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

(vii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

#### 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (NOV 2006) (DEVIATION)

(a) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (a) if the contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(b) Notwithstanding the requirements of any other clause in this contract, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vii) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998) (29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201)

(vi) 52.222-41, Service Contract Act of 1965, as Amended (JUL 2005), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

(vii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(c) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

#### 52.232-4059 CONTRACTOR INVOICE

Payment will be made via Electronic Fund Transfer to the EFT address loaded in the Central Contractor Register (CCR).

Following are items that must be on your invoice:

1. Name and address of contractor/vendor.
2. Invoice date.
3. Contract or purchase order number.
4. Line item number, with description, quantity, unit of measure, unit price and extended price of supplies delivered or services performed.
5. Shipping and payment terms (for example, shipment number and date of shipment, prompt payment discount terms). Bill of lading number and shipment will be shown for shipments on government bills of lading.
6. Name and address of contractor official to whom payment is to be sent (if remittance is to an address other than that on contract/purchase order, and a proper "Notice of Assignment" or separate remittance address is indicated in contract/purchase order).
7. Name, title, telephone number and mailing address of person to be notified in event of a defective invoice.

8. Any other information or documentation required by the contract/purchase order (evidence of shipment, acceptance test, etc.).

All of the above invoice information should be submitted in electronic format in accordance with DFAR 252.232-7003 ELECTRONIC SUBMISSION OF PAYMENT REQUESTS (MAR 2007).

Red River Army Depot Payment Office is:

DFAS - Rock Island Operating Location  
ATTN: DFAS-RI-FPV Bldg 68  
Rock Island, IL 61299-8300

#### 52.246-2 INSPECTION OF SUPPLIES--FIXED-PRICE (AUG 1996)

(a) Definition. "Supplies," as used in this clause, includes but is not limited to raw materials, components, intermediate assemblies, end products, and lots of supplies.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering supplies under this contract and shall tender to the Government for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Contractor to be in conformity with contract requirements. As part of the system, the Contractor shall prepare records evidencing all inspections made under the system and the outcome. These records shall be kept complete and made available to the Government during contract performance and for as long afterwards as the contract requires. The Government may perform reviews and evaluations as reasonably necessary to ascertain compliance with this paragraph. These reviews and evaluations shall be conducted in a manner that will not unduly delay the contract work. The right of review, whether exercised or not, does not relieve the Contractor of the obligations under the contract.

(c) The Government has the right to inspect and test all supplies called for by the contract, to the extent practicable, at all places and times, including the period of manufacture, and in any event before acceptance. The Government shall perform inspections and tests in a manner that will not unduly delay the work. The Government assumes no contractual obligation to perform any inspection and test for the benefit of the Contractor unless specifically set forth elsewhere in this contract.

(d) If the Government performs inspection or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties. Except as otherwise provided in the contract, the Government shall bear the expense of Government inspections or tests made at other than the Contractor's or subcontractor's premises; provided, that in case of rejection, the Government shall not be liable for any reduction in the value of inspection or test samples.

(e)(1) When supplies are not ready at the time specified by the Contractor for inspection or test, the Contracting Officer may charge to the Contractor the additional cost of inspection or test.

(2) The Contracting Officer may also charge the Contractor for any additional cost of inspection or test when prior rejection makes reinspection or retest necessary.

(f) The Government has the right either to reject or to require correction of nonconforming supplies. Supplies are nonconforming when they are defective in material or workmanship or are otherwise not in conformity with contract requirements. The Government may reject nonconforming supplies with or without disposition instructions.

(g) The Contractor shall remove supplies rejected or required to be corrected. However, the Contracting Officer

may require or permit correction in place, promptly after notice, by and at the expense of the Contractor. The Contractor shall not tender for acceptance corrected or rejected supplies without disclosing the former rejection or requirement for correction, and, when required, shall disclose the corrective action taken.

(h) If the Contractor fails to promptly remove, replace, or correct rejected supplies that are required to be removed or to be replaced or corrected, the Government may either (1) by contract or otherwise, remove, replace, or correct the supplies and charge the cost to the Contractor or (2) terminate the contract for default. Unless the Contractor corrects or replaces the supplies within the delivery schedule, the Contracting Officer may require their delivery and make an equitable price reduction. Failure to agree to a price reduction shall be a dispute.

(i)(1) If this contract provides for the performance of Government quality assurance at source, and if requested by the Government, the Contractor shall furnish advance notification of the time (i) when Contractor inspection or tests will be performed in accordance with the terms and conditions of the contract and (ii) when the supplies will be ready for Government inspection.

(2) The Government's request shall specify the period and method of the advance notification and the Government representative to whom it shall be furnished. Requests shall not require more than 2 workdays of advance notification if the Government representative is in residence in the Contractor's plant, nor more than 7 workdays in other instances.

(j) The Government shall accept or reject supplies as promptly as practicable after delivery, unless otherwise provided in the contract. Government failure to inspect and accept or reject the supplies shall not relieve the Contractor from responsibility, nor impose liability on the Government, for nonconforming supplies.

(k) Inspections and tests by the Government do not relieve the Contractor of responsibility for defects or other failures to meet contract requirements discovered before acceptance. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or as otherwise provided in the contract.

(l) If acceptance is not conclusive for any of the reasons in paragraph (k) hereof, the Government, in addition to any other rights and remedies provided by law, or under other provisions of this contract, shall have the right to require the Contractor (1) at no increase in contract price, to correct or replace the defective or nonconforming supplies at the original point of delivery or at the Contractor's plant at the Contracting Officer's election, and in accordance with a reasonable delivery schedule as may be agreed upon between the Contractor and the Contracting Officer; provided, that the Contracting Officer may require a reduction in contract price if the Contractor fails to meet such delivery schedule, or (2) within a reasonable time after receipt by the Contractor of notice of defects or nonconformance, to repay such portion of the contract as is equitable under the circumstances if the Contracting Officer elects not to require correction or replacement. When supplies are returned to the Contractor, the Contractor shall bear the transportation cost from the original point of delivery to the Contractor's plant and return to the original point when that point is not the Contractor's plant. If the Contractor fails to perform or act as required in (1) or (2) above and does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure, the Government shall have the right by contract or otherwise to replace or correct such supplies and charge to the Contractor the cost occasioned the Government thereby.

(End of clause)

## 52.246-4001 INSPECTION AND ACCEPTANCE

Red River Army Depot  
Texarkana, Texas

## 52.246-4002 PARTIAL SHIPMENTS

Partial shipments are authorized.

## 52.247-4049 PACKAGING &amp; MARKING

Material is to be packaged and packed in a manner to afford adequate protection against damage during shipment from supply source

to destination. Package and pack shall conform to the applicable carrier rules, regulations and tariffs and may be the industry standard commercial practice. All unit, intermediate and exterior packs shall, as a minimum, be marked as follows by any means which provides legibility and durability: Federal Stock Number and/or Manufacturer's Part Number; Noun; Quantity; Purchase Order Number; Requisition Number; Mark for Bldg; and Ship To. Exterior shipping containers shall contain a packing list or other documentation setting forth contents.

## 252.211-7003 ITEM IDENTIFICATION AND VALUATION (JUN 2005)

(a) Definitions. As used in this clause'

Automatic identification device means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

Concatenated unique item identifier means--

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

Data qualifier means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

DoD recognized unique identification equivalent means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at <http://www.acq.osd.mil/dpap/UID/equivalents.html>.

DoD unique item identification means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

Enterprise means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

Enterprise identifier means a code that is uniquely assigned to an enterprise by an issuing agency.

Government's unit acquisition cost means--

(1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;

(2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery; and

(3) For items produced under a time-and-materials contract, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery.

Issuing agency means an organization responsible for assigning a non-repeatable identifier to an enterprise (i.e., Dun & Bradstreet's Data Universal Numbering System (DUNS) Number, Uniform Code Council (UCC)/EAN International (EAN) Company Prefix, or Defense Logistics Information System (DLIS) Commercial and Government Entity (CAGE) Code).

Issuing agency code means a code that designates the registration (or controlling) authority for the enterprise identifier.

Item means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

Lot or batch number means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

Machine-readable means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

Original part number means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

Parent item means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

Serial number within the enterprise identifier means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

Serial number within the part, lot, or batch number means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

Serialization within the enterprise identifier means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

Serialization within the part, lot, or batch number means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

Unique item identifier means a set of data elements marked on items that is globally unique and unambiguous.

Unique item identifier type means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at [http://www.acq.osd.mil/dpap/UID/uid\\_\\_types.html](http://www.acq.osd.mil/dpap/UID/uid__types.html).

(b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.

(c) DoD unique item identification or DoD recognized unique identification equivalents.

(1) The Contractor shall provide DoD unique item identification, or a DoD recognized unique identification equivalent, for--

(i) All delivered items for which the Government's unit acquisition cost is \$5,000 or more; and

(ii) The following items for which the Government's unit acquisition cost is less than \$5,000:

Contract line, subline, or exhibit line item No.	Item description:
---	-------------------

(iii) Subassemblies, components, and parts embedded within delivered items as specified in Attachment Number ----  
--.

(2) The concatenated unique item identifier and the component data elements of the DoD unique item identification or DoD recognized unique identification equivalent shall not change over the life of the item.

(3) Data syntax and semantics of DoD unique item identification and DoD recognized unique identification equivalents. The Contractor shall ensure that--

(i) The encoded data elements (except issuing agency code) of the unique item identifier are marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:

(A) Data Identifiers (DIs) (Format 06) in accordance with ISO/IEC International Standard 15418, Information Technology `` EAN/UCC Application Identifiers and ANSI MH 10 Data Identifiers and ANSI MH 10 Data Identifiers and Maintenance.

(B) Application Identifiers (AIs) (Format 05), in accordance with ISO/IEC International Standard 15418, Information Technology `` EAN/UCC Application Identifiers and ANSI MH 10 Data Identifiers and ANSI MH 10 Data Identifiers and Maintenance.

(C) Text Element Identifiers (TEIs), in accordance with the DoD collaborative solution ``DD" format for use until the solution is approved by ISO/IEC JTC1 SC 31. The ``DD" format is described in Appendix D of the DoD Guide to Uniquely Identifying Items, available at <http://www.acq.osd.mil/dpap/UID/guides.htm>; and

(ii) The encoded data elements of the unique item identifier conform to ISO/IEC International Standard 15434, Information Technology--Syntax for High Capacity Automatic Data Capture Media.

(4) DoD unique item identification and DoD recognized unique identification equivalents.

(i) The Contractor shall--

(A) Determine whether to serialize within the enterprise identifier or serialize within the part, lot, or batch number; and

(B) Place the data elements of the unique item identifier (enterprise identifier; serial number; and for serialization within the part, lot, or batch number only; original part, lot, or batch number) on items requiring marking by paragraph (c)(1) of this clause, based on the criteria provided in the version of MIL-STD-130, Identification Marking of U.S. Military Property, cited in the contract Schedule.

(ii) The issuing agency code--

(a) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires unique item identification under paragraph (c)(1)(i) or (ii) of this clause, in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, either as part of, or associated with, the Material Inspection and Receiving Report, the following information:

(1) Concatenated unique item identifier; or DoD recognized unique identification equivalent.

(2) Unique item identifier type.

(3) Issuing agency code (if concatenated unique item identifier is used).

(4) Enterprise identifier (if concatenated unique item identifier is used).

(5) Original part number.

(6) Lot or batch number.

(7) Current part number (if not the same as the original part number).

(8) Current part number effective date.

(9) Serial number.

(10) Government's unit acquisition cost.

(e) For embedded DoD serially managed subassemblies, components, and parts that require unique item identification under paragraph (c)(1)(iii) of this clause, the Contractor shall report at the time of delivery, either as part of, or associated with the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Concatenated unique item identifier or DoD recognized unique identification equivalent of the parent item delivered under a contract line, subline, or exhibit line item that contains the embedded subassembly, component, or part.

(2) Concatenated unique item identifier or DoD recognized unique identification equivalent of the embedded subassembly, component, or part.

(3) Unique item identifier type.\*\*

(4) Issuing agency code (if concatenated unique item identifier is used).\*\*

(5) Enterprise identifier (if concatenated unique item identifier is used).\*\*

(6) Original part number.\*\*

(7) Lot or batch number.\*\*

(8) Current part number (if not the same as the original part number).\*\*

(9) Current part number effective date.\*\*

(10) Serial number.\*\*

(11) Unit of measure.

(12) Description.

\*\* Once per item.

(f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause in accordance with the data submission procedures at <http://www.acq.osd.mil/dpap/UID/DataSubmission.htm>.

(g) Subcontracts. If paragraph (c)(1) of this clause applies, the Contractor shall include this clause, including this paragraph (g), in all subcontracts issued under this contract.

(End of clause)

#### 252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (JAN 2007)

(a) The Contractor agrees to comply with the following Federal Acquisition Regulation (FAR) clause which, if checked, is included in this contract by reference to implement a provision of law applicable to acquisitions of commercial items or components.

  X   52.203-3, Gratuities (APR 1984) (10 U.S.C. 2207).

(b) The Contractor agrees to comply with any clause that is checked on the following list of Defense FAR Supplement clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components.

(1)        252.205-7000, Provision of Information to Cooperative Agreement Holders (DEC 1991) (10 U.S.C. 2416).

(2)        252.219-7003, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DoD Contracts) (APR 1996) (15 U.S.C. 637).

(3)        252.219-7004, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (Test Program) (JUN 1997) (15 U.S.C. 637 note).

(4)   X   252.225-7001, Buy American Act and Balance of Payments Program (JUN 2005) (41 U.S.C. 10a-10d, E.O. 10582).

- (5) X 252.225-7012, Preference for Certain Domestic Commodities (JAN 2007) (10 U.S.C. 2533a).
- (6) X 252.225-7014, Preference for Domestic Specialty Metals (JUN 2005) (10 U.S.C. 2533a).
- (7) \_\_\_ 252.225-7015, Restriction on Acquisition of Hand or Measuring Tools (JUN 2005) (10 U.S.C. 2533a).
- (8) \_\_\_ 252.225-7016, Restriction on Acquisition of Ball and Roller Bearings (MAR 2006) (Section 8065 of Public Law 107-117 and the same restriction in subsequent DoD appropriations acts).
- (9) \_\_\_ 252.225-7021, Trade Agreements (NOV 2006) (19 U.S.C. 2501-2518 and 19 U.S.C. 3301 note).
- (10) \_\_\_ 252.225-7027, Restriction on Contingent Fees for Foreign Military Sales (APR 2003) (22 U.S.C. 2779).
- (11) \_\_\_ 252.225-7028, Exclusionary Policies and Practices of Foreign Governments (APR 2003) (22 U.S.C. 2755).
- (12)(i) \_\_\_ 252.225-7036, Buy American Act--Free Trade Agreements--Balance of Payments Program (OCT 2006) (41 U.S.C. 10a-10d and 19 U.S.C. 3301 note).
- (ii) \_\_\_ Alternate I (OCT 2006) of 252.225-7036.
- (13) \_\_\_ 252.225-7038, Restriction on Acquisition of Air Circuit Breakers (JUN 2005) (10 U.S.C. 2534(a)(3)).
- (14) \_\_\_ 252.226-7001, Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns (SEP 2004) (Section 8021 of Pub. L. 107-248 and similar sections in subsequent DoD appropriations acts).
- (15) \_\_\_ 252.227-7015, Technical Data--Commercial Items (NOV 1995) (10 U.S.C. 2320).
- (16) \_\_\_ 252.227-7037, Validation of Restrictive Markings on Technical Data (SEP 1999) (10 U.S.C. 2321).
- (17) X 252.232-7003, Electronic Submission of Payment Requests (MAY 2006) (10 U.S.C. 2227).
- (18) \_\_\_ 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).
- (19) X 252.243-7002, Requests for Equitable Adjustment (MAR 1998) (10 U.S.C. 2410).
- (20)(i) \_\_\_ 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).
- (ii) \_\_\_ Alternate I (MAR 2000) of 252.247-7023.
- (iii) \_\_\_ Alternate II (MAR 2000) of 252.247-7023.
- (iv) \_\_\_ Alternate III (MAY 2002) of 252.247-7023.
- (21) \_\_\_ 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).
- (c) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract (FAR 52.212-5), the Contractor shall

include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

- (1) 252.225-7014, Preference for Domestic Specialty Metals, Alternate I (APR 2003) (10 U.S.C. 2533a).
- (2) 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).
- (3) 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).
- (4) 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(End of clause)